

# CENTER FOR BEAM PHYSICS SEMINAR

## “Injector Research at the APS”

John Lewellen  
ANL

Friday October 4, 2002, 10:30 AM  
Albert Ghiorso Conference Room (71-264), LBNL  
●●● Refreshments served at 10:20 AM □ ●●●

### Abstract:

High-brightness electron beam injectors play critical roles in planned accelerators and linac-based light sources. While conventional high-brightness injector designs have performed reasonably well to date, additional work - experimental and theoretical - is required to ensure the success of these planned accelerators. This talk reviews some of the past and ongoing work performed at the Advanced Photon Source in the field of high-brightness electron injector design.

### Biographical data and research interests:

John Lewellen earned his B.S. in Physics at Case Western Reserve University in 1991, and his Ph.D. in Applied Physics from Stanford University in 1997. At Stanford he worked under Dick Pantell on high-efficiency and compact, low-cost free-electron lasers. He has been at the Advanced Photon Source at Argonne National Laboratory ever since, where he has worked on the Low-Energy Undulator Test Line (LEUTL) single-pass free-electron laser, and on novel electron injector design.

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